IN THE CLAIMS:

1-8. (Canceled)

9. (Previously presented) A gated field emission device made by a method comprising:

growing a substantially vertically aligned carbon nanostructure, the substantially vertically aligned carbon nanostructure coupled to a substrate;

covering at least a portion of the substantially vertically aligned carbon nanostructure with a dielectric;

forming a gate, the gate coupled to the dielectric; and

releasing the substantially vertically aligned carbon nanostructure by forming an aperture in the gate and removing a portion of the dielectric,

wherein the gate includes an aperture substantially aligned with the substantially vertically aligned carbon nanostructure;

wherein the gated field emission device includes

another dielectric coupled to the gate, the another dielectric including a conduit substantially aligned with the substantially vertically aligned carbon nanostructure and

a focusing electrode coupled to the another dielectric, the focusing electrode including another aperture substantially aligned with the substantially vertically aligned carbon nanostructure, and

wherein the dielectric, the gate, the another dielectric and the another aperture define a well that circumscribes the substantially vertically aligned carbon nanostructure.

10. (Previously presented) An integrated circuit, comprising a gated field emission device made by a method comprising:

growing a substantially vertically aligned carbon nanostructure, the substantially vertically aligned carbon nanostructure coupled to a substrate;

covering at least a portion of the substantially vertically aligned carbon nanostructure with a dielectric;

forming a gate, the gate coupled to the dielectric; and

releasing the substantially vertically aligned carbon nanostructure by forming an aperture in the gate and removing a portion of the dielectric,

wherein the gate includes an aperture substantially aligned with the substantially vertically aligned carbon nanostructure;

wherein the gated field emission device includes

another dielectric coupled to the gate, the another dielectric including a conduit substantially aligned with the substantially vertically aligned carbon nanostructure and

a focusing electrode coupled to the another dielectric, the focusing electrode including another aperture substantially aligned with the substantially vertically aligned carbon nanostructure, and

wherein the dielectric, the gate, the another dielectric and the another aperture define a well that circumscribes the substantially vertically aligned carbon nanostructure.

11-18. (Cancelled)

19. (Currently amended) A gated field emission device, comprising ~~the apparatus of claim 11~~:

a substantially vertically aligned carbon nanostructure coupled to a substrate;

a dielectric coupled to the substrate and surrounding at least a portion of the substantially vertically aligned carbon nanostructure;

a gate coupled to the dielectric, the gate including an aperture substantially aligned with the substantially vertically aligned carbon nanostructure;

another dielectric coupled to the gate, the another dielectric including a conduit substantially aligned with the substantially vertically aligned carbon nanostructure; and

a focusing electrode coupled to the another dielectric, the focusing electrode including another aperture substantially aligned with the substantially vertically aligned carbon nanostructure,

wherein the dielectric, the gate, the another dielectric and the another aperture define a well that circumscribes the substantially vertically aligned carbon nanostructure.

20. (Currently amended) An integrated circuit, comprising ~~the apparatus of claim 11~~:

a substantially vertically aligned carbon nanostructure coupled to a substrate;

a dielectric coupled to the substrate and surrounding at least a portion of the substantially vertically aligned carbon nanostructure;

a gate coupled to the dielectric, the gate including an aperture substantially aligned with the substantially vertically aligned carbon nanostructure;

another dielectric coupled to the gate, the another dielectric including a conduit substantially aligned with the substantially vertically aligned carbon nanostructure; and

a focusing electrode coupled to the another dielectric, the focusing electrode including another aperture substantially aligned with the substantially vertically aligned carbon nanostructure,

wherein the dielectric, the gate, the another dielectric and the another aperture define a well that circumscribes the substantially vertically aligned carbon nanostructure.

21. (Original) A circuit board, comprising the integrated circuit of claim 20.

22. (New) The integrated circuit of claim 20, wherein the substantially vertically aligned carbon nanostructure includes a vertically aligned carbon nanofiber.

23. (New) The integrated circuit of claim 20, wherein the focusing electrode composes an electrostatic focusing lens.

24. (New) The integrated circuit of claim 20, wherein the dielectric surrounds a single substantially vertically aligned carbon nanostructure.

25. (New) The integrated circuit of claim 20, wherein the focusing electrode includes another aperture that is substantially aligned with the aperture of the gate.

26. (New) The gated field emission device of claim 19, wherein the substantially vertically aligned carbon nanostructure includes a vertically aligned carbon nanofiber.

27. (New) The gated field emission device of claim 19, wherein the focusing electrode composes an electrostatic focusing lens.

28. (New) The gated field emission device of claim 19, wherein the dielectric surrounds a single substantially vertically aligned carbon nanostructure.

29. (New) The gated field emission device of claim 19, wherein the focusing electrode includes another aperture that is substantially aligned with the aperture of the gate.